

## JUN 07 2002

# **TECH CENTER 1600/2900**





1646

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/777,921A

DATE: 05/30/2002

TIME: 10:21:33

Input Set : A:\1103 SUBSTITUTE\_SEQLIST.TXT Output Set: N:\CRF3\05302002\I777921A.raw

- 4 <110> APPLICANT: MERKULOV et al.
- 6 <120> TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
- NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
- AND USES THEREOF
- 10: <130> FILE REFERENCE: CL001103
- 12 <140> CURRENT APPLICATION NUMBER: 09/777,921A
- C--> 13 <141> CURRENT FILING DATE: 2002-02-07
  - 15 <160> NUMBER OF SEQ ID NOS: 126
  - 17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
  - 19 <210> SEO ID NO: 1 20 <211> LENGTH: 2673

  - 21 <212> TYPE: DNA
  - 22 <213> ORGANISM: Homo sapiens
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  - 27 cctgcgcctc tgggaccatg ttgcgctggc tgcgggactt cgcgctgccc accgcggcct 180
  - 28 gccaggacgc ggagcagccg acgcgctacg agaccetett ccaggcactg gaccgcaatg 240
  - 29 gggacggagt ggtggacatc ggcgagctgc aggaggggct caggaacctg ggcatccctc 300
  - 30 tgggccagga cgccgaggag aaaattttta ctactggaga tgtcaacaaa gatgggaagc 360
  - 31 tggattttga agaatttatg aagtacctta aagaccatga gaagaaaatg aaattggcat 420
  - 32 ttaagagttt agacaaaat aatgatggaa aaattgaggc ttcagaaatt gtccagtctc 480
  - 33 tocagacact gggtotgact atttotgaac aacaagcaga gttgattott caaagcattg 540
  - 34 atgttgatgg gacaatgaca gtggactgga atgaatggag agactacttc ttatttaatc 600
  - 35 ctgttacaga cattgaggaa attatccgtt tctggaaaca ttctacagga attgacatag 660

  - 36 gggatagett aactatteea gatgaattea eggaagaega aaaaaaatee ggacaatggt 720
  - 37 ggaggcaget tttggcagga ggcattgctg gtgctgtctc tcgaacaagc actgcccctt 780
  - 38 tygaccytct gaaaatcatg atgcaggttc acggttcaaa atcagacaaa atgaacatat 840
  - 39 ttggtggctt tcgacagatg gtaaaagaag gaggtatccg ctcgctttgg aggggaaatg 900
  - 40 gtacaaacgt catcaaaatt gctcctgaga cagctgttaa attctgggca tatgaacagt 960
  - 41 acaagaagtt acttactgaa gaaggacaaa aaataggaac atttgagaga tttatttctg 1020
  - 42 gttccatggc tggagcaact gcacagactt ttatatatcc aatggaggtt atgaaaacca 1080
  - 43 ggctggctgt aggcaaaact gggcagtact ctggaatata tgattgtgcc aagaagattt 1140
  - 44 tgaaacatga aggcttggga qctttttaca aaggctatgt tcccaattta ttaggtatca 1200

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  - 53 cacaaaaggg aagacggtaa caatggtcac ttcaaacttt tggqctaaat tatatgtaca 1740

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Input Set : A:\1103 SUBSTITUTE\_SEQLIST.TXT
Output Set: N:\CRF3\05302002\1777921A.raw

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56 ttgaacaaaa tttgttttgt gtgttagagt tataaatcat taatctttat ttcgggtggt 1920
57 ttacgtttat gccagttcct ttatatttaa atttcttgtt ttatatattt tgaatgtctt 1980
58 tatagatttc tttaaatttc cttatagaac cattaataga aaatcattac atttaaaata 2040
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60 tgaatacgaa tgaacacagt qgtggaattt ctgaagggaa gtgatgaaat tatatttatt 2160
61 tcagtgggca cttttccatt ttaccactgt accattattt ggttcctgga gttatacact 2220
62 aattttcagt atattactgt taaattacca acacaaggca atttatttga aagattccgt 2280
63 ttatcctgcc attgctttga aaagcagcag gaaacgaaat tttttgactt gtatcagctt 2340
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65 tttagtcagg aagacttctt gggaccattc ttagtaacct gaaatttctt ttttaattgc 2460
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67 ctttgaactt getgtttgea atatgggeag ceacaaaggg ggagagatge etattaaate 2580
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81 Arg Asn Gly Asp Gly Val Val Asp Ile Gly Glu Leu Gln Glu Gly Leu
83 Arg Asn Leu Gly Ile Pro Leu Gly Gln Asp Ala Glu Glu Lys Ile Phe
85 Thr Thr Gly Asp Val Asn Lys Asp Gly Lys Leu Asp Phe Glu Glu Phe
                       70
                                           75
87 Met Lys Tyr Leu Lys Asp His Glu Lys Lys Met Lys Leu Ala Phe Lys
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89 Ser Leu Asp Lys Asn Asn Asp Gly Lys Ile Glu Ala Ser Glu Ile Val
               100
                                   105
91 Gln Ser Leu Gln Thr Leu Gly Leu Thr Ile Ser Glu Gln Gln Ala Glu
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                                                   125
93 Leu Ile Leu Gln Ser Ile Asp Val Asp Gly Thr Met Thr Val Asp Trp
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95 Asn Glu Trp Arg Asp Tyr Phe Leu Phe Asn Pro Val Thr Asp Ile Glu
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                                           155
97 Glu Ile Ile Arg Phe Trp Lys His Ser Thr Gly Ile Asp Ile Gly Asp
                                       170
99 Ser Leu Thr Ile Pro Asp Glu Phe Thr Glu Asp Glu Lys Lys Ser Gly
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101 Gln Trp Trp Arg Gln Leu Leu Ala Gly Gly Ile Ala Gly Ala Val Ser
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103 Arg Thr Ser Thr Ala Pro Leu Asp Arg Leu Lys Ile Met Met Gln Val
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Input Set : A:\1103 SUBSTITUTE\_SEQLIST.TXT
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105 His Gly Ser Lys Ser Asp Lys Met Asn Ile Phe Gly Gly Phe Arg Gln
106 225
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107 Met Val Lys Glu Gly Gly Ile Arg Ser Leu Trp Arg Gly Asn Gly Thr
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109 Asn Val Ile Lys Ile Ala Pro Glu Thr Ala Val Lys Phe Trp Ala Tyr
110
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                                     265
111 Glu Gln Tyr Lys Lys Leu Leu Thr Glu Glu Gly Gln Lys Ile Gly Thr
112
113 Phe Glu Arg Phe Ile Ser Gly Ser Met Ala Gly Ala Thr Ala Gln Thr
                            295
115 Phe Ile Tyr Pro Met Glu Val Met Lys Thr Arg Leu Ala Val Gly Lys
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                                             315
117 Thr Gly Gln Tyr Ser Gly Ile Tyr Asp Cys Ala Lys Lys Ile Leu Lys
118
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119 His Glu Gly Leu Gly Ala Phe Tyr Lys Gly Tyr Val Pro Asn Leu Leu
120
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                                    345
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123 Lys Ser Tyr Trp Leu Asp Asn Phe Ala Lys Asp Ser Val Asn Pro Gly
        370
                            375
124
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125 Val Met Val Leu Leu Gly Cys Gly Ala Leu Ser Ser Thr Cys Gly Gln
126 385
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127 Leu Ala Ser Tyr Pro Leu Ala Leu Val Arg Thr Arg Met Gln Ala Gln
128
                    405
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129 Ala Met Leu Glu Gly Ser Pro Gln Leu Asn Met Val Gly Leu Phe Arg
                420
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131 Arg Ile Ile Ser Lys Glu Gly Ile Pro Gly Leu Tyr Arg Gly Ile Thr
132
            435
                                440
133 Pro Asn Phe Met Lys Val Leu Pro Ala Val Gly Ile Ser Tyr Val Val
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141 <212> TYPE: DNA
142 <213> ORGANISM: Homo sapiens
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147 <223> OTHER INFORMATION: n = A, T, C or G
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152 caattccctt cccgctagtc acaactggta actactgatt tgttttctgt ccctatagtt 180
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156 ttggtgtgaa gataattttc tcagcaaaaa cgctgacagg taatttttct aagtattact 420
157 tttttaaaaa agtaaaatag cctgtagccc cagctactca ggaggctgag gcaggagaat 480
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Input Set : A:\1103 SUBSTITUTE\_SEQLIST.TXT
Output Set: N:\CRF3\05302002\1777921A.raw

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DATE: 05/30/2002

#### RAW SEQUENCE LISTING

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Input Set : A:\1103 SUBSTITUTE\_SEQLIST.TXT
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#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:3; N Pos. 51972,51973,51974,51975,51976,51977,51978,51979,51980,51981
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Seq#:3; N Pos. 52002,52003,52004,52005,52006,52007,52008,52009,52010,52011
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/30/2002 PATENT APPLICATION: US/09/777,921A TIME: 10:21:34

Input Set : A:\1103 SUBSTITUTE\_SEQLIST.TXT
Output Set: N:\CRF3\05302002\1777921A.raw

Seq#:3; N Pos. 52012,52013,52014,52015,52016,52017,52018,52019,52020,52021

Seq#:3; N Pos. 52022,52023,52024,52025

### VERIFICATION SUMMARY

PATENT APPLICATION: US/09/777,921A

DATE: 05/30/2002 TIME: 10:21:34

Input Set : A:\1103 SUBSTITUTE\_SEQLIST.TXT
Output Set: N:\CRF3\05302002\1777921A.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:11940
L:549 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:23940
L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:24000
L:551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:24060
L:552 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:24120
L:553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:24180
L:554 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:24240
L:1015 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:51900
L:1016 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:51960
L:1017 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:52020